

REMARKS

This Reply and Amendment is intended to be completely responsive to the final Office Action mailed on April 18, 2005. Claims 14 and 19-38 are pending in the Application. Upon entry of this Reply and Amendment, independent Claims 14 and 37-38 and dependent Claims 26 and 35 will be amended.

The Applicant respectfully submits that the amendments are intended to address the rejections identified by the Examiner and to place pending Claims 14 and 19-38 in condition for allowance. The Applicant respectfully requests entry of the amendments under 37 C.F.R. § 116 and allowance of the pending claims.

Claim Rejections – 35 U.S.C. § 102(b)

In Section 3 of the Office Action, the Examiner rejected Claims 14, 19-22, 26, 29, 31-32 and 35-38 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,858,450 issued to Jones (“Jones”).

Jones describes a “sampling, mixing and metering apparatus” including a “sampling head 12 [that] includes a valve mechanism 16 defined by first and second valve blocks 18 and 20 respectively, linearly movable (slidable) relative to each other between two valve positions, namely, a sampling position and a delivery position” (see col. 1, lines 67-68 and col. 1, lines 1-3). Jones further discloses a “scavenge vacuum device 54 [that] extracts or evacuates most of the sample left in passageway 90 (and the probe 92 connected thereto)” but acknowledges that “in fact all of the liquid picked up by the probe may not be sucked into the probe and wiping of the probe to prevent contamination or carry over into the next sample could become necessary” (see col. 8, lines 32-34 and col. 9, lines 30-33).

Jones does not appear to disclose, teach or suggest a “source of dilutant” or a “solvent” and a “pump valve” operable for “rinsing the probe” as now required by independent Claims 14 and 38 (as amended).

Heimborg et al. describes an apparatus having a “worksurface 2” and a “horizontal rail 7.” A “robotic arm 8” includes a “rail 12” and travels longitudinally on rail 7. “Mounted traveling on rail 12 in the longitudinal direction thereof (Y direction) are three Z arms 13-15.” The “Z arm 13” has “an element for mounting a pipette tip 20.” (See col. 2, lines 58-65 and col. 3, lines 4-7 and 18-20). Heimborg et al. does not appear to disclose, teach or suggest a “probe holder slidably mounted on the Z arm” as now required by independent Claim 37 (as amended).

Independent Claim 14

Claim 14 is in independent form. Dependent Claims 19-36 depend from independent Claim 14. Independent Claim 14 (as amended) recites a “liquid chromatography sample injection system” comprising, in combination with other elements, a “pump valve interfacing with the injector valve and a probe pump and a source of dilutant; wherein the pump valve is movable between a first position where the probe pump is operable to dispense and aspirate through the probe, and a second position where the probe pump communicates with the source of dilutant for rinsing the probe.”

The Applicant submits that the combination of subject matter now recited in independent Claim 14 (as amended), considered as a whole, is not disclosed, taught or suggested by Jones, alone or in any combination with the other references cited in the Final Office Action, because Jones does not disclose, teach or suggest a “source of dilutant” and a “pump valve” operable for “rinsing the probe” as now required by independent Claim 14 (as amended) .

Accordingly, the Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. § 102(b) and allowance of independent Claim 14 (as amended) and dependent Claims 19-36.

Independent Claim 37

Claim 37 (as amended) is in independent form and recites a “liquid chromatography sample injection system” comprising in combination with other elements, a “probe drive system” that comprises an “X arm extending horizontally in an X direction; a Y arm slidably mounted on the X arm wherein the Y arm extends horizontally in a Y direction; and a Z arm slidably mounted on the Y arm wherein the Z arm extends vertically in a Z direction; and a probe holder slidably mounted on the Z arm” and “an injector valve mounted on the Z arm.”

The Applicant submits that the combination of subject matter now recited in independent Claim 37 (as amended), considered as a whole, is not disclosed, taught or suggested by Jones, alone or in any combination with the other references cited in the Final Office Action, because Jones, alone or in any proper combination with Heimburg et al. does not disclose, teach or suggest a “probe holder slidably mounted on the Z arm” as now required by independent Claim 37 (as amended).

Accordingly, the Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. § 102(b) and allowance of independent Claim 37 (as amended).

Independent Claim 38

Claim 38 (as amended) is in independent form and recites a “method of injecting a sample into a sample analyzer of a liquid chromatography sample injection system” comprising in combination with other elements, the steps of “operating a pump to provide a negative pressure through a pump valve for aspirating a liquid sample through a probe of the probe drive system and into the injection valve” and “operating the pump to provide a positive pressure through the pump valve for injecting the entrained liquid sample into a sample analyzer” and “rinsing the probe by operating the pump to deliver a solvent through the pump valve and the injection valve to the probe.”

The Applicant submits that the combination of subject matter now recited in independent Claim 38 (as amended), considered as a whole, is not disclosed, taught or suggested by Jones, alone or in any combination with the other references cited in the Final Office Action, because Jones does not disclose, teach or suggest a “solvent” and a “pump valve” operable for “rinsing the probe” as now required by independent Claim 38 (as amended).

Accordingly, the Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. § 102(b) and allowance of independent Claim 38 (as amended).

Claim Rejections – 35 U.S.C. § 103(a)

In Sections 6-9 of the Final Office Action, the Examiner rejected dependent Claims 23-25, 27-28, 30 and 33-34 under 35 U.S.C. § 103(a) as being unpatentable over Jones, alone, and in combination with other cited references.

Dependent Claims 23-25, 27-28, 30 and 33-34 depend from independent Claim 14 (as amended). The Applicant submits that independent Claim 14 (as amended) now recites a combination of subject matter that is patentable. Accordingly, the Applicant respectfully submits that the rejections under 35 U.S.C. § 103(a) have been overcome and that dependent Claims 23-25, 27-28, 30 and 33-34 are also patentable (see 35 U.S.C. § 112 ¶ 4).

The Applicant respectfully requests reconsideration and allowance of dependent Claims 23-25, 27-28, 30 and 33-34.

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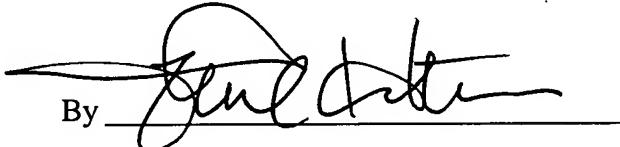
The Applicant respectfully submits that each and every outstanding objection and rejection to the pending claims has been overcome, and the Application is in condition for allowance. Upon entry of this Reply and Amendment, independent Claims 14 and 37-38, and dependent Claims 26 and 35 will be amended. The Applicant believes that the present

Application is now in condition for allowance and respectfully requests reconsideration and allowance of pending Claims 14 and 19-38.

The Examiner is encouraged to contact the undersigned by telephone if the Examiner believes that a telephone interview would advance the prosecution of the present Application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-2350. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-2350. If any extensions of time are needed for timely acceptance of papers submitted herewith, the Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-2350.

Respectfully submitted,

By 

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FOLEY & LARDNER LLP
Customer Number: 23524
Telephone: (608) 258-4263
Facsimile: (608) 258-4258

Paul S. Hunter
Attorney for the Applicant
Registration No. 44,787